BRUHATH BANGALORE MAHANAGARA PALIKE, Electrical Division

Name of the Work : Modified and change of Work for Construction of Electrical timer cables and power saving arrangements with all accessories in Ward No 4

SL. No	Description	Unit	As per modified		
			Qty	Rate	Amt
	Part- A (Items in the Original Estimate)				
1	Supplying High pressure sodium vapour street light fitting die cast aluminium canopy with aluminium housing for control gear, finished stove enamel gray glassy white canopy interior with a pair of anodized aluminium reflectors with toughened flat glass, gasket lining for drip insect resistance duly wired with porcelain holder copper choke, igniter and HPF condenser including a sodium vapour lamp.II 250 Wattsa) Group 'A'	Each	65	6150.00	399750.00
2	Supplying & fixing mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete.b) Using 32mm dia G.I pipe	Each	65	685.00	44525.00
3	Supply and fixing of ..... cross arm including all Hardwares compete as per the standard technical specification.b) 2 Pin 45x45x5mm-510mm	Each	15	123.00	1845.00
4	Supplying and Fixing..... including all Hardwares etc complete as per the Standard technical Specification. a) 1.1 KV Pin insulator	Each	50	70.00	3500.00
	d) No.8 Strain Insulator	Each	15	24.00	360.00
5	Supplying and stringing of ACSR Conductor (6/2.59mm Al+1/2.59mm steel)	Mtr	2500	19.80	49500.00
6	Supplying and fixing ..... including all Hardwares etc complete as per the standard technical specification e) RCC Clamp	Each	15	61.00	915.00
7	Fabricating supplying and mounting MS box made out... SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer pain and finally finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint étc., completeb) 16 SWG	sqcm	395000	0.33	130350.00
8	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., complete d) 100 Amps	Each	13	415.00	5395.00
9	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and washers etc.,Group 'A' PWD SR 2007-08	Each	11	4200.00	46200.00
10	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required. a) 5-32 Amps SP 1) Group 'A'.	Each	11	195.00	2145.00

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Sl No	Description	Unit	As per modified		
			Qty	Rate	Amt
11	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc.. complete with AC-3 Rating and as per IS-13947.d) 100-125 Amps	Each	10	7450.00	74500.00
12	Supplying and fixing angle iron frame work fabricated out of M.S angle iron... and M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. . (32.9a) a) 40x40x6mm	Rmtr	100	240.00	24000.00
13	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanized, steel wire/steel tap armoured cable with PVC outer sheathing 1.1KV ClassI. Class 'A' PVC Cable d) 4 core 16sqmm	per mtr	85	150.00	12750.00
14	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required.II. On wall /Structure a) 6 sqmm to 16sqmm	Rmtr	85	18.00	1530.00
15	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes f) 16 sqmm	Each	40	14.00	560.00
16	Supplying and fixing Moulded Case Circuit Breaker (MCCB) Over the existing wood/panel board using necessary screws, bolts, nuts and wiring thermal Magnetci Microprocessed release and Earth Fault as per IS-13947. (Icu=Ics) THREE POLE a) 100 Amps 25 kA.2) Group 'B'	Each	30	3460.00	103800.00
17	Supplying.....amps rated 3 phase with neutral bus bar using requirement capacity electrolytic aluminium strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6 mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.a) 100Amps 4x30x6mm Alluminium Strips	Rmtr	25	1600.00	40000.00
18	Supply and erection of .....mtr RCC pole including earth work etc.. complete as per the standard technical specification.b) 9 Mtr 145Kg WL	Each	14	6583.00	92162.00
19	Supplying 70/125 Watts MH integral post top lantern Metal halide fitting suitable for pole mounted with fully vermin, weather proof, elegant in shpae, appearance, UV stabilized clear acrylic diffusers, camouflaged horizontal lamp, IP 54 protection. Electrical safety class 1. The fitting shall have ferromagnetic copper choke with capacitor, igniter and fully wired to operate on 230 V 50Hz AC supply with 70 /125 Watts MH Lamp..a) Group 'A'	Each	0	5230.00	0.00
20	LT 3 phase 5 wire Aerial Bunched Cable of size 3X25+1X16+1X25+1X35 sqmm (Standard Stock materials 2010-11)	P/Mtr	3000	81.45	244350.00
	LT 1 phase 3 wire Aerial Bunched Cable of size 1X25+1X16+1X25 sqmm	P/Mtr	0	40.10	0.00
21	Striniging of 1.1 KV grade aerial bunched 3 core cable of XLPE insulation standard aluminium conductor standard around a weather resistant black XLPE insulated AAA messanger wire (3X 25 Sq mm + 1X 16 sqmm + 1X 25Sqmm + 1X 35 sqmm)	P/Mtr	3000	8.96	26883.00
22	Piercing connector suitable 16 Sqmm - 95 Sqmm AB cable service connections (Standard Stock materials 2010-11)	Nos	200	210.00	42000.00

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Sl No	Description	Unit	As per modified		
			Qty	Rate	Amt
23	Dead End Clamp/ Anchor clamps assembly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	Nos	14	140.00	1960.00
24	suspension clamp assemblly 25 to 95 sqmm bear messanger (Standard Stock materials 2010-11)	Nos	100	280.00	28000.00
25	Errection of suspension clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	Nos	100	85.00	8500.00
26	Errection of Anchor clamp 25 to 95 sqmm bear messanger (Labour charges 2010-11)	Nos	14	85.00	1190.00
27	Istallation of insulation piercing connector for main to street light Main: 16 -95 sqmm,Tap: 1.5-10 sqmm (EP 95)	Nos	200	40.00	8000.00
28	Digging of pits 1.5 mtr depth for errection of of 7.5/8 mtr Long steel/RCC/PSC/PCC supports Hard soil	Per Pit	0	529.00	0.00
29	Concrete Works Providing cement concrete to poles and guysets with material and labour including necessary curing etc.. comlpete (cost does not include excavation) c) Providing coping for pole with CC1:2:4 (as per actuals)	Each	0	200.00	0.00
30	Errection of Poles : Releasing and Re-Errection of Steel supports 9.0 to 10.00 mtr long such as 22.68 kg (50 lbs) Rail, I beam of sizes 200 X 100 mm, 175X 90 mm , 125 X 100 mm, Fabricated poles, tubular poles in pits of 1.8 mtr Depth, aligning, refilling with soil For Errection =Rs 154.00 releasing of materials shall be 90 % of the cost of ereection as per bescom circular BES/GM/(T)/BC-20/F-664/05-06/CYS 174 Dt:10.01.06. Therefore Releasing and Re-Errection = Rs 154.00+ 0.9X154.00=292.60	Nos	0	292.60	0.00
31	Street Light and other Works Releasing and Fixing of mercury Vapour lamp fitting /Ornamental light fitting with Control Boxes etc.For Fixing =Rs 224.00 releasing of materials shall be 90 % of the cost of ereection as per bescom circular BES/GM/(T)/BC-20/F-664/05-06/CYS 174 Dt:10.01.06. Therefore Releasing and Fixing = Rs 224.00+ 0.9X224.00=292.60	Set	0	425.60	0.00
32	Hire Charges Components for Tractor 50 HP ,Sl no 20, Page No XXXIV, KPWD SR CIVIL 2010-11.Per Day Rs 2240.00	Day	0	2240.00	0.00
	EIRL				
1	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required. c) 5-32 Amps DP1) Group 'A'	Each	80	510.00	40800.00
2	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., completeb) 32 Amps	Each	80	100.00	8000.00
3	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanized, steel wire/steel tap armoured cable with PVC outer sheathing 1.1KV ClassI, Class 'A' PVC Cable f) 3.5 core 35sqmm	per mtr	300	250.00	75000.00
	e) 3.5 core 25sqmm	per mtr	56	215.00	12040.00
4	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required.II. On wall /Structure b) 25 sqmm to 75 sqmm	Rmtr	356	11.00	3916.00

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Sl No	Description	Unit	As per modified		
			Qty	Rate	Amt
5	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and Copper conductor single core cabe in open or consealed system of wiring. I Group A Materials.c) 2.5 sqmm	mtr	700	25.00	17500.00
	d) 4 sqmm	mtr	100	32.00	3200.00
6	Fabricating, supplying and erecting swaged tubular pole of height... Mtr having three sections and providing two coats of re oxide paint and finished with two coats of enameled paint of approved quality and colour and M.S. Base plate of suitable size welded at the bottom of the pole (as per IS) and 40 mm dia GI/flexible PVC pipe of 1 Mtr. Length fitted to the heavy gauge polycarbonate control box including 5 way connector of size 167x125x82mm for 7.5 M pole/ 200x160x98 mm for remaining length of pole with front opening cover, with locking arrangements and suitable capacity MCB/DP Switch. The pole shall be erected n cement concrete work(1:2:4) including excavation and refilling of planting depth of the pole to the ground level and the coping CC shall be upto 0.6M above ground level as per IS 2713-7.1. Erection of light duty pole on-Foot path a) 7.5 Mt (4.5Mt Hb 114.3mm dia 4.5mm thick x 1.5M Hm.88.9mm dia 4.50mm thick x 1.5M Ht. 76.1mm dia 3.25mm thick) as per IS 410 SP 5 (Base plate of size 300X300X6mm)-KPWD ELE SR 2007-08	Each	15	9000.00	135000.00
7	Supplying and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and shall be mounted on Octogonal pole using necessary bolts, nuts, etc.. complete.a) Single Arm Bracket with 1000mm Standard	Each	15	1650.00	24750.00
8	Supplying and fixing of class A (medium duty) GI pipe of wall thick ness not less than 3.25 mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class . a. 40 mm	Rmtr	10	240.00	2400.00
9	Supply and Installation/Fixing /Provision for mounting of HRC Fuse /MCB with suitable connector/teminal for 3 Ph/1 Ph connections with Loop-in & Loop-Out terminals for 10 Sqmm/25 sqmm 3.5 C AI/AR/Cu/AR Cable and branchout 2.5 Sqmm 2 Core AI/Cu PVC insulated cable, enclosure, which should be shock proof, safe IP 65 (Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP 65 Thermoplastic, Polyamide glands and /or grommets.b) 260x210x116mm	Each	20	1570.00	31400.00
10	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete. (As per Civil SR KSRB 1-2, P-7)b. In hard Soil	Rmtr	40	50.00	2000.00
	d. Asphalt cutting	Rmtr	10	80.00	800.00
11	Supplying, fixing wiring earth electrode for gounding conduits, I.C.Cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI 2.5 mtr long buried in a pit... the pit should be filled with equal proportion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12 mm dia.	Each	2	1950.00	3900.00

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Sl No	Description	Unit	As per modified		
			Qty	Rate	Amt
12	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc c. 25 Sqmm	Each	2	286.00	572.00
13	Supplying and Fixing 4 Nos of 590 mm length High Yield Tensile Cold Rolled Pitched threads (680 N/sq mm) 27 mm Bolt dia (Mkt Rate)	Nos	3	1350.00	4050.00
14	Hire Charges Components for Crane Charges , crane 80 tonnes Sl no 86, code no 1311, Page No XXXX, KPWD SR CIVIL 2012-13	hr	12	866.00	10392.00
15	Material Components for Trailor 30 tonne capacity ,Sl no821, Page No XXIX, KPWD SR CIVIL 2012-13	hr	4	1000.00	4000.00
16	Releasing and Re-Fixing halogen/metal halide/SVL/IL floodlight fitting over existing pole/wall ceiling including clamps ,bolts ,nuts and wiring using suitable capacity wires complete i.e Rs=130.00 for fixing & 0.9 of Rs=130.0	Each	12	247.00	2964.00
17	Supplying and drawing PVC flexible unarmoured copper control cable of approved make.E) 8c x 2.5Sqmm.1 Group A	Per mtr	24	316.00	7584.00
18	Casting of suitable foundation for the 16/20 mtr High mast including designing and cost of all materials like Anchor plates,Template and washers labour charges, all other incidental charges etc,. complete as per specification and Drawing given in KPWD elect SR 2010-11(P.No 107) Detailed Calculation as per CIVIL SR items Enclosed.	Each	1	26914.00	26914.00
19	Supply and fixing of 70 Watts heavy duty open construction ferromagnetic copper ballast for HPSV/HPMH lampsd) 400 Watts1. Group A	Each	3	1680.00	5040.00
20	Supplying and fixing of HPMH lamps on existing fitting mounted on tubular poleI) Single end d) 400 Watts	Each	6	1152.00	6912.00
21	Supplying and and fixing/replacement of ignitor suitable for 70 to 400 watts SV/MH fittings	Each	6	520.00	3120.00
22	Material Components for Anchor Plates (IS 2062) Sl no 423, code no 0712, Page No XIV, KPWD SR CIVIL 2012-13	Each	2	705.00	1410.00
	Shifting Work				
23	LT 3 Phase ABC Cable of Size 3X95+1X16+1X70 Sqmm insulated Messenger	mtr	350	292.27	102294.50
24	Piercing Connector suitable for 16 Sqmm- 95 Sqmm, AB cable Street light Connection	No	10	152.00	1520.00
25	Piercing Connector suitable for 16 Sqmm-95 Sqmm, ABC cable Service Connection	No	45	217.00	9765.00
26	Universal Hook Bolt, nut etc..	No	10	289.00	2890.00
27	RCC pole clamp-(154mmx95 clamps) to fix the universal hook	No	10	280.00	2800.00
28	Dead end clamp/Anchor clamps assembly	No	4	145.00	580.00
29	Suspension Clamp assembly	No	4	289.00	1156.00
30	Pre-insulated Lugs CPTAU for 95 sqmm for transformer connection	No	3	360.00	1080.00
31	Bare to LV ABC connector -Type :-CDR/CN 1S 95UK	No	6	360.00	2160.00
32	Cable Straight thru' joint kits suitable for 95 Sq mm	No	3	310.00	930.00
33	End cap for 50/70 Sqmm	No	2	19.00	38.00
34	16/25 Sqmm Aluminium Lead wires.10Mtrs/pole	No	20	20.00	400.00
35	Stringing LT 3 Phase ABC Cable of Size 3X95+1X16+1X70 Sqmm insulated Messenger	mtr	350	10.75	3762.50

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Sl No	Description	Unit	As per modified		
			Qty	Rate	Amt
36	Installation of Piercing Connector suitable for 16 Sqmm- 95 Sqmm, AB cable Street light Connection	No	10	48.00	480.00
37	Installation of Piercing Connector suitable for 16 Sqmm-95 Sqmm, ABC cable Service Connection	No	45	68.00	3060.00
38	Installation of Piercing Connector suitable for 25Sqmm-95 Sqmm, ABC cable Service Connection(main to main for phase cable	No	4	57.00	228.00
39	Fixing of Universal Hook Bolt, nut etc.,	No	10	102.00	1020.00
40	Fixing of RCC pole clamp-(154mmx95 clamps) to fix the universal hook	No	10	39.00	390.00
41	Fixing of Deadend clamp/Anchor clamps assembly	No	4	136.00	544.00
42	Fixing of Suspension Clamp assembly	No	4	102.00	408.00
43	Installation of Bare to LV ABC connector -Type :-CDR/CN 1S 95UK	No	6	118.00	708.00
44	Installation of Straight joint(Full Tension) suitable for 70 Sqmm,LT,AB cable - MJPT Type	No	3	113.00	339.00
45	Releasing and Refixing of Service mains SR page No 10 Rs 25 Per connection	No	45	30.00	1350.00
46	Releasing of Pin Insulator	No	12	50.00	600.00
47	Bescom Deposit and Misscelaneous				27500.00
	Total				**1994337.00**

CERTIFICATE :-

1. The place was inspected and the work is essential.
2. The provision made in the estimate are adequate and necessary and the work comes in the BBMP limit and is legitimate Charges on the BBMP funds.
3. The estimate is based on KPWD (Ele)2010-11 and Bescom S.R. Rates.

Jr. Engineer (Elecl) /Asst Eng

Asst. Executive Engineer (Elecl)
Byt Sub Div, Yelahanka Zone

EXECUTIVE ENGINEER (ELECL)
Yelahanaka Zone, BBMP

"Modified Estimate Approved"

Chief Engineer
Yelahanka Zone
BBMP,Bangalore-92

Chief Engineer
Yelahanka Zone
Bruhath Bangalore Mahanagara Palike
Bangalore 92

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